

Application Serial No. 10/731,241
Reply to Office Action of May 10, 2005

PATENT
Docket: CU-3484

Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) A multi-loop oscillator comprising:

first to Nth delay loops wherein oscillation signal having a predetermined period is generated by selecting one of the first to Nth delay loops according to potential variation of supply voltage;

a loop selection section for selecting one loop from among the first to the Nth delay loops, according to potential variation of supply voltage;

and

a supply voltage detection circuit section for detecting variation of supply voltage, and the supply voltage detection circuit section controls an operation of the loop selection section.
- 2-3. (cancelled)
4. (original) The multi-loop oscillator as claimed in claim 1, wherein a delay time is gradually reduced from the first delay loop to the Nth delay loop.
5. (original) The multi-loop oscillator as claimed in claim 4, wherein the first delay loop is selected and the oscillation signal has a lowest frequency, when the supply

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voltage exceeds the maximum reference value.

6. (original) The multi-loop oscillator as claimed in claim 5, wherein one loop from among the second loops "LOOP2" to the Nth loop "LOOPn" is selected when the supply voltage is less than the maximum reference value.

7. (currently amended) The multi-loop oscillator as claimed in claim 6, wherein the Nth loop "LOOPn" is selected when the supply voltage is not exceeding ~~than~~ the minimum reference value.

8. (original) The multi-loop oscillator as claimed in claim 1, wherein each of the first to Nth delay loops includes an inverter chain.

9. (original) The multi-loop oscillator as claimed in claim 8, wherein the supply voltage is used as a driving voltage of the inverter chain.

10. (original) A multi-loop oscillator comprising:

a loop circuit section for forming a plurality of loops for generating oscillation signals having different frequencies in response to an enable signal;

a supply voltage detection section for detecting a supply voltage level and generating a plurality of selection signals corresponding to the detected supply voltage level;

a loop selection section for selecting one loop from among a plurality of

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loops in response to the plurality of selection signals, and inverting and outputting
an input signal; and
an output section for buffering and outputting an oscillation signal of the
loop selected by the loop selection section.

11. (original) The multi-loop oscillator as claimed in claim 10, wherein each of the plurality of loops is constructed by an inverter chain.